

high speed-downlink shared channel provided bit rates for scheduling priority indicators with higher priority than HS_FACH traffic priority.

[0086] A method as above, wherein D_TransDchX is determined by summing a Cell_PCH state to a Cell_DCH state transition time and a transmission time in a Cell_DCH state of a packet with a length equal to the threshold value.

[0087] A method as above, wherein the threshold is associated with a minimum value and changing comprises changing the value of the threshold to the minimum value in response to the Threshold having a value less than the minimum value.

[0088] A method as above, wherein the threshold is associated with a maximum value and changing comprises changing the value of the threshold to the maximum value of the threshold in response to the Threshold having a value greater than the maximum value.

[0089] A method as above, wherein the adapting and causing are performed in response to a measurement report being received from a base station of a provided bit rate. A method as in this paragraph, wherein the provided bit rate indicates a total number of bits whose transmission over a radio interface has been considered successful. A method as in this paragraph, further comprising configuring the base station for common measurement so that the base station periodically sends the measurement report.

[0090] A method as above, performed by a radio network controller in at least one of a wideband code division multiple access or a high speed packet access system.

[0091] Embodiments herein may be implemented in software (executed by one or more processors), hardware (e.g., an application specific integrated circuit), or a combination of software and hardware. In an example embodiment, the software (e.g., application logic, an instruction set) is maintained on any one of various conventional computer-readable media. In the context of this document, a “computer-readable medium” may be any media or means that can contain, store, communicate, propagate or transport the instructions for use by or in connection with an instruction execution system, apparatus, or device, such as a computer, with one example of a computer described and depicted, e.g., in FIG. 3. A computer-readable medium may comprise a computer-readable storage medium (e.g., memories 125, 155, 171, 291 or other device) that does not encompass propagating signals but may be any media or means that can contain or store the instructions for use by or in connection with an instruction execution system, apparatus, or device, such as a computer.

[0092] If desired, the different functions discussed herein may be performed in a different order and/or concurrently with each other. Furthermore, if desired, one or more of the above-described functions may be optional or may be combined.

[0093] Although various aspects are set out above, other aspects comprise other combinations of features from the described embodiments, and not solely the combinations described above.

[0094] It is also noted herein that while the above describes example embodiments of the invention, these descriptions should not be viewed in a limiting sense. Rather, there are several variations and modifications which may be made without departing from the scope of the present invention.

[0095] The following abbreviations that may be found in the specification and/or the drawing figures are defined as follows:

[0096] 3GPP third generation partnership project
[0097] BTS Base Transceiver Station
[0098] CPC Computer Program Code
[0099] CRNC Controlling Radio Network Controller
[0100] DCH Dedicated CHannel
[0101] DL Downlink (from base station to UE)
[0102] E-DCH Enhanced-DCH
[0103] FTP File Transfer Protocol
[0104] FACH Forward Access CHannel
[0105] GGSN gateway GPRS support node
[0106] GPRS General Packet Radio Service
[0107] GSM Global System for Mobile Communications
[0108] HSDPA High Speed Downlink Packet Access
[0109] HS-DSCH High Speed-Downlink Shared CHannel
[0110] HSPA High Speed Packet Access
[0111] HTTP HyperText Transmission Protocol
[0112] IP Internet Protocol
[0113] kBytes kilobytes
[0114] MAC-hs Media Access Control-high speed
[0115] Mbits/s Megabits per second
[0116] ms milliseconds
[0117] NCE Network Control Element
[0118] NodeB a base station
[0119] QPSK Quadrature Phase Shift Keying
[0120] RACH Random Access CHannel
[0121] RAN Radio Access Network
[0122] Rel Release
[0123] RNC Radio Network Controller
[0124] Rx Receiver
[0125] SGSN serving GPRS support node
[0126] SPI Scheduling Priority Indicator
[0127] Tx Transmitter
[0128] UE User Equipment
[0129] UL Uplink (from UE to base station)
[0130] UMTS Universal Mobile Telecommunications System
[0131] WCDMA Wideband Code Division Multiple Access

1. A method, comprising:

adapting a high speed Cell_FACH feature to a load of a cell, the adapting performed at least by changing a value of a data volume threshold corresponding to HS_FACH user equipment so delay experienced by a user equipment in a Cell_FACH state is kept lower than a delay the user equipment would experience if moved to a Cell_DCH state, where the value of the data volume threshold determines a data volume that, if not exceeded, causes a user equipment to be kept in the Cell_FACH state; and deciding for each user equipment in the Cell_FACH state whether to keep the user equipment in the Cell_FACH state or move the user equipment to the Cell_DCH state, the deciding for each user equipment based at least on the changed value for the data volume threshold and a data volume for the user equipment.

2. The method of claim 1, wherein:

deciding decides for a selected user equipment the selected user equipment should be kept in the Cell_FACH state; and

the method further comprises performing no action regarding the state of the user equipment to allow the selected user equipment to stay in the Cell_FACH state.